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COMMAND AND CONTROL FOR OPERATIONAL MANEUVER FROM THE SEA,
WHERE DO WE GO FROM HERE?

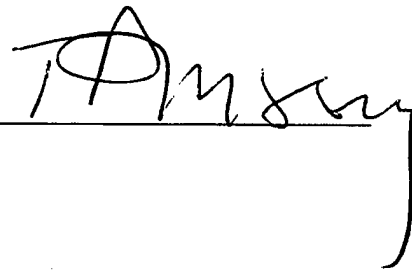
By

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A paper submitted to the faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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Abstract of

COMMAND AND CONTROL FOR OPERATIONAL MANEUVER FROM THE SEA, WHERE DO WE GO FROM HERE?

The Navy and Marine Corps team are developing doctrine that will enable them to execute maneuver warfare from sea based platforms as part of a concept known as *Operational Maneuver from the Sea*. A key part of the effort to develop this innovative doctrine involves establishing effective Command and Control (C²) organizations that will foster success on tomorrow's battlefields. Vying for codification in future OMFTS doctrine are three different proposals for Command and Control architecture. They include use of the current doctrine as delineated in Joint Publication 3-02(CATF/CLF); placing amphibious components under a fleet Composite Warfare Commander as a Naval Expeditionary Task Force, or establishment of "supported" and "supporting" units by the Commander Joint Task Force. Each of these concepts trace their ancestry to recent periods in military history—World War II, the Cold War era, or the post Cold War period. To some degree each one mirrors the organization, equipment and military philosophy in use during their development. When examined and validated against the philosophical approach embodied in OMFTS, only the "supported/supporting" concept has the flexibility to work in the high tempo environment predicated by OMFTS.

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INTRODUCTION

*The Chinese have a saying that "change is a dragon."
If you try to ignore him or control him, he will eat you.
But if you can ride the dragon of change, you can survive,
even prosper. I commit...we're going to ride the dragon.*

General Charles C. Krulak
Commandant of the Marine Corps

As the Navy and Marine Corps move into the 21st century, change clearly looms on the horizon. The end of the Cold War with the associated reductions in force structure and overseas basing, as well as growing instability in developing nations, have forced the Naval Services to reconsider how they will conduct future operations. In response, both the Navy and Marines have embraced a new warfighting concept that moves away from "blue water" and "attrition" based strategies in place since World War II. As articulated in the 1994 Naval Service White Letter, *"Forward...From the Sea"*, the spotlight now shines on the littoral regions of the world; an area where four out of five national capitals reside along with 70% of the world's population.¹ The new concept for conducting operations in this littoral area is called *Operational Maneuver From the Sea* (OMFTS). Utilizing tenets of maneuver warfare, such as overwhelming tempo and momentum, OMFTS attempts to rapidly project power from the littoral areas with minimal external support, seeking to disable the enemy's ability to react to our operations.² In short, OMFTS combines amphibious operations with maneuver warfare.

The crucial development of OMFTS doctrine has stalled, however, as the Navy and Marine Corps grapple with two key issues—worldwide area denial capabilities and Command and Control (C²) of forces during OMFTS. To many, proliferation of area denial technologies, such as mines, sea-skimming missiles, and diesel submarines, undermine the

viability of the OMFTS concept.³ Proponents of OMFTS claim emerging technology and new tactics, techniques and procedures (TTPs) can mitigate much of this threat. Unfortunately, the establishment of viable doctrine from which to develop the TTP's necessary for success may never occur unless the Navy/Marine team can *first* reach agreement on Command and Control issues. Selection of any future OMFTS command and control structure requires both a historical reference point and a careful examination of current and proposed command and control arrangements to determine if they are compatible with the spirit and principles articulated in "*Forward...From the Sea*" and OMFTS.

DEFINING COMMAND AND CONTROL

Definition: The Joint Chiefs of Staff (JCS) define Command as "the authority that a commander in the military service lawfully exercises over subordinates by virtue of rank or assignment" which includes responsibility and authority to organize, direct, coordinate and control forces to accomplish an assigned mission.⁴ The JCS defines Control as "authority which may be less than full command exercised by a commander over part of the activities of subordinate or other organizations."⁵ Control is often delineated as Operational Control (OPCON) or Tactical Control (TACON). OPCON is the "transferable authority to perform functions of command over subordinate forces involving organizing, employing, assigning tasks, designating objectives and giving authoritative direction to accomplish the mission"; TACON is the "detailed and local direction of movement and maneuver necessary to accomplish the mission."⁶ In simple terms the purpose of Command and Control is to ensure that subordinates carry out the commander's desires. The ability to issue orders and

instructions and to direct the implementation of those instruction and orders is implicit and serves as a cornerstone for effective Command and Control.

Importance of Command and Control: Command and Control becomes a critical factor when forces engage in potentially hostile actions. With the different methods of control and differences in the authority between levels of command, all units involved in military operations must understand the ability of different units to control subordinate units and the type of control they may have over those units.⁷ Logically, C² arrangements should reflect the organization, equipment, and doctrinal “spirit” embraced by a military service. As the Naval Services develop and implement OMFTS, with its emphasis on maneuver warfare principles including the inherent importance of “commander’s intent”, it is important to adopt clear Command and Control architecture that supports the execution of high tempo, synchronized operations.⁸

HISTORICAL DEVELOPMENT OF C² FOR AMPHIBIOUS OPERATIONS

World War II Era (CATF/CLF): Amphibious operations have existed since ancient times, with one of the earliest recorded instances occurring in 490 BC, when the Persians invaded Greece.⁹ Modern amphibious operations, however, have their genesis in the early part of this century. After a careful study of the British Army’s failed amphibious landing at Galipoli in 1915, key leaders in the Marine Corps realized the importance of developing forces and concepts for the seizure of advanced naval bases. Navy leaders, wary of growing Japanese militancy in the Pacific Region, also realized the potential utility of amphibious forces. By 1934, the Navy in conjunction with the Marines had published the *Tentative Manual for Landing Operations*.¹⁰ This document, with only minor modifications, became the

cornerstone of amphibious doctrine during the numerous Allied amphibious assaults conducted in both the Pacific and European Theaters.

A key component of this doctrine was the Command and Control relationships established to conduct the complex, large-scale assaults and extensive follow-on logistical support required by the force structure and equipment of that era. During this period, Command and Control for amphibious operations centered on the Commander Amphibious Task Force (CATF) and his relationship with the Commander Landing Force (CLF).¹¹ Doctrinally, a Fleet Commander would issue an Initiating Directive, which designated the CATF and CLF, as well as the geographical limits of the Amphibious Objective Area (AOA). The CATF was the overall commander of the operation and always a naval officer—since the principal task of transport to the area, off-loading, providing fire support and logistics, and protecting the entire force—were predominantly naval tasks. The CLF, usually an Army or Marine general officer, was responsible for all land operations, and assumed overall control of land forces once they were established ashore.¹² Interestingly, the CATF and CLF were coequals during all planning phases of the operation, which ensured the concerns of the person responsible for achieving success ashore, had an equal voice during the detailed planning and designation of objectives on land. Only when the troops embarked did the CATF reign supreme. This core doctrine, with its inherent C² relationships, remained virtually unchanged throughout World War II. Despite the advent of the Nuclear Age, the Inchon landing during the Korean Conflict served to reinforce the viability of the WWII doctrine. With only marginal review and modification in 1962, this same doctrine became the basis for Joint Publication 3-02 (Amphibious Operations).¹³ After over fifty years, the virtually original command and

control relationships of World War II remain codified as the “doctrinal” way to organize and conduct amphibious operations today.

Cold War Era: Though doctrine for the conduct of amphibious operations currently remains much as it was fifty years ago, during the forty years of Cold War, Navy and Marine personnel did continue to experiment with new ideas and concepts. The rapid build-up of the Soviet military during the 1970’s, to include surface ships and submarines equipped with sophisticated missiles and torpedoes, led the U.S. Navy to reassess its doctrine, organization for combat, and fleet Command and Control structure. As a result of the assessment, the Navy implemented a new command and control architecture termed Composite Warfare Commander (CWC), designed to establish more effective coordination of different functional areas in the *defense* of a naval task force.¹⁴

The relationships for the new arrangement were codified in Naval Warfare Publication (NWP) 10-1, which established an Officer in Tactical Command (OTC)/ CWC, who exercised control over a variety of functional areas (*e.g.*, antiair warfare, antisubmarine warfare, *etc.*), each with its own commander.¹⁵ This arrangement proved particularly effective for the surface fleets. At its core were highly developed, mutually supporting TTPs which delineated specific actions and dedicated platforms to effectively handle the predicted onslaught of Soviet missiles, aircraft, and torpedoes.

The 1980’s became a period of massive build up of American military forces under President Reagan. During this time the Navy embarked on an effort to build a 600-ship Navy to counter the growing naval capabilities of the USSR. Simultaneously, Navy leadership decreed a fundamental shift in strategy, adopting an *offensive* focus that sought to take the fight for sea control to the Soviet navy in its home waters. Widespread deployment of cruise

missiles aboard U.S. ships and the development of "strike warfare" packages with aircraft carriers and surface ships, resulted in the addition of a strike warfare commander as an additional functional commander under the OTC/CWC.¹⁶ Clearly the primary focus for the Navy throughout the final years of the Cold War era centered on "blue water" operations, with only peripheral thought toward amphibious warfare development.

Throughout much of the Cold War the Marines focused most of their intellectual effort toward tactical training for troops engaged in combat in Korea and later Vietnam. The later years of the Cold War period, however, do represent a period of intense development in Marine Corps' warfighting doctrine.¹⁷ Concurrent, with its forward presence mission, the Marines focused on two very important missions associated with a potential conflict with the Soviets. First, was the exploitation of the northern European flank in Norway. To help facilitate this mission, the Marines with the assistance of the Norwegian government, pre-positioned equipment and supplies in Norway's mountains. Deployments and cold weather training in Norway became an integral part of the annual Marine Corps training plan.¹⁸ The second wartime mission involved thwarting any Soviet attempt to invade and control the oil-rich Persian Gulf region.¹⁹ The Marines, much like the American Army forces stationed in Europe, determined that under the best circumstances the Soviet forces would easily outnumber American combat troops. This situation led to a reassessment of existing doctrine in an effort to find concepts that could take advantage of the flexibility, high technology equipment and better training of American military personnel. Results from the reassessment eventually led the USMC (along with the Army) to adopt "maneuver warfare" as their primary warfighting doctrine in 1987.²⁰ Much like their naval brethren during this period, however, the Corps failed to focus their doctrinal development on issues associated with

amphibious warfare. Nevertheless, the new doctrinal "spirit" contained within maneuver warfare tenets established a way of thinking about warfighting which would greatly effect amphibious doctrine after the end of the Cold War.

Post Cold War Era: With the dissolution of the Soviet empire, the United States emerged as the sole remaining *superpower*. This new era, absent a looming military competitor, precipitated a much smaller (almost 30%) American military force structure.²¹ Nevertheless, military missions, whether Military Operations Other Than War (MOOTW) or actual armed intervention, have increased throughout the past ten years. These operations span the spectrum from full-scale combat (Desert Storm, circa 1991) to humanitarian relief in hurricane ravaged Central America.²² Ongoing operations in Yugoslavia, Bosnia, and northern Iraq seem to indicate the world remains a chaotic and uncertain place.

The new emphasis on the littoral regions by the Navy and Marine Corps, with the concurrent adoption of OMFTS, has refocused both services on amphibious warfare doctrine. Integrated Fleet Battle Experiments (FBEs) coordinated with USMC Sea Dragon experimentation, has resulted in several proposals for Command and Control of amphibious forces in future operations. The most widely publicized proposal, envisioned a modified CWC concept with an Amphibious Warfare Commander (AMWC) serving as a functional component commander (antiair, antisubmarine, *etc.*) as governed in CWC directives and Fleet Tactical Memorandums (TACMEMOs).²³ Proponents believe that this Command and Control relationship can efficiently integrate the operations of Amphibious Ready Groups (ARGs) with Carrier Battle Groups (CVBGs), and represent a harbinger of future OMFTS operations. Various versions of the CWC concept exist. The most recent example being the Naval Expeditionary Task Force (NETF). Last year's official rejection of the NETF concept

by both the Navy and Marine Corps, however, has sidelined the further development of this idea.²⁴ Yet, for many Naval Service leaders, the CWC/NETF organization remains a possible consideration for future operations.

The most recent development in establishing future C² structures is the “supported” and “supporting” concept. This idea espouses that C2 for future OMFTS should depart from the traditional CATF/CLF arrangement, instead relying on Command and Control relationships delineated by the Commander Joint Task Force (CJTF) dependent on the mission parameters and focus of effort for each operation. Establishing directives issued by the CJTF determine both the “supported” commander and the various units “supporting” his efforts. Included in this concept are two new Command and Control structures, Commander Navy Amphibious Force (CNAF), and Commander Amphibious Landing Force (CALF). The CNAF represents the Navy officer designated as commander of the Navy task organization assigned to conduct an amphibious operation, while the CALF signifies the Army or Marine officer designated to command the landing force in an amphibious operation.²⁵ Though similar in title to the CATF/CLF structure, it differs significantly in that titles will not identify a command relationship, but rather a more flexible “support” relationship that can “morph” based on the type of amphibious operation and forces involved. Kernel Blitz '99 utilized this structure for limited portion of its exercise operations.

Today: The Navy and Marine Corps have reached an impasse on future C² during amphibious operations. Five different doctrinal publications remain affected by the unresolved command and control issues. These include Joint Publication 3-02 (Joint Doctrine for Amphibious Operations), under revision since 1995; Joint Publication 3-18 (Joint Forcible Entry Operations); Navy Doctrine Publication 3 (Naval Operations); Naval Warfare

Publication 3-56 (Composite Warfare Commander Manual); and Naval Warfare Publication 3-02.3/Marine Corps Warfighting Publication 3-32 (Maritime Prepositioned Force Operations). Each of these documents is essential to the continued development of doctrine for OMFTS and the TTPs necessary for its employment.

Proposed ideas generally fall into the following three categories summarized as follows:

1) current Joint Publication 3-02 with minor modifications is battle-tested and remains applicable for future operations; 2) the CWC/NETF concept and; 3) the “supported”/“supporting”(CNAF/CALF) concept.

An examination of each proposal that reflects the underlying themes and “spirit” of the OMFTS concept is invaluable in determining which course should take us into the future.

EXAMINING THE CONCEPTS

Joint Publication 3-02: Only two years ago Admiral Picotte, U.S. Navy (Retired) wrote, “Within the joint hierarchy there is room for the traditional CATF and CLF relationship...a basic expeditionary building block is already in place.”²⁶ His thoughts echo the old adage, ‘if it a’int broke, don’t fix it’, and certainly exemplify the opinion of those who believe the current CATF/CLF arrangement is battle proven and flexible enough to serve naval forces into the future. This debate is not new and in the same article Admiral Picotte recalls an article written by Admiral Blandy, U.S. Navy (Retired) in the early 1951, that lamented a proposed change to the amphibious doctrine that had worked so well. The landing at Inchon, soon thereafter validated Admiral Blandy’s belief that the CATF/CLF relationship remained viable.

Unquestionably, this doctrine proved highly successful during both World War II and the Korean Conflict. One key aspect of the doctrine was its establishment of command relationships that allowed the integrated, detailed planning and the unity of command that were essential to the intricate, large-scale and lengthy engagements that characterized amphibious operations in World War II. Even today, much of the planning that occurs under the CATF/CLF concerns the detailed organization and sequencing of assault vehicles, landing craft, and follow-on logistic support.²⁷ The primary emphasis of most CATF/CLF planning remains the establishment of a lodgment as a venue to allow for additional forces to land and seize the designated land objectives beyond the beachhead.

Unfortunately, OMFTS does not envision an operational environment that lends itself to effective use of the current CATF/CLF organization. First, OMFTS promises a much higher operational tempo. Assignment of missions could routinely come with little or no notice and the execution of orders may occur in hours on days, vice the weeks or months that occurred during World War II²⁸. Secondly, current doctrine decrees that transition of command occur when the CLF is firmly established ashore. Yet most recent exercises and real world operations using the forward-deployed ARG/MEU have transitions that are event driven vice geographic. This geographic of the CATF/CLF approach fails to support sea based operations central to OMFTS. Additionally, reductions in forces and equipment will negate the need to spend lengthy periods in developing detailed phasing plans for thousands of landing craft and ships trying to establish a beach support area. Remember that one of the primary advantages of maneuver warfare is that it allows a numerically inferior force to overwhelm a much larger organization. Consequently, OMFTS planning should focus (though not exclusively) on designated inland objectives that attack enemy critical

vulnerabilities and lead to his defeat. Again, this interest is much different than the majority of planning conducted in Joint Publication 3-02. Finally, the current CATF/CLF arrangement is philosophically grounded in a different type of war. The CATF/CLF organization was designed for an era of attrition warfare, where the best option available was to go into the “teeth” of the enemy with more equipment, in face-to-face slugging match. OMFTS remains on the opposite end of the spectrum. Instead agility, synchronization, and flexibility to attack enemy weaknesses in a fluid manner become the nexus of planning priorities.

CWC/NETF: The concept of integrating the amphibious forces into a fleet, as a functional component remains intriguing. After over twenty years of refinement and validation at sea, the CWC concept reinforces the ability of a “flattened” organization to operate along established lines of mutual support in order to respond successfully to rapidly emerging threats.²⁹ On the basis of this adaptability and quickness, CWC appears to lend itself to the high tempo world of OMFTS. Nevertheless, several issues question the viability of using this Command and Control structure for future amphibious operations. First, the CWC design remains an open ocean *defensive*-type operation.³⁰ The heart of the CWC concept is the numerous highly synchronized TTPs that are coordinated and instantly executed in the *defense* of ships. While both impressive and effective within its design purpose, this *defensive* approach is contradictory to the *offensive* nature of operations embraced by OMFTS.

Second, the CWC/NETF structure with its coequal (and numerous) functional area commanders makes it difficult to prioritize any *single* effort within a fleet, even when amphibious operations are *the* main effort. That the Commander of the NETF (CNETF) would set priorities is obvious, but would this influence functional commanders whose

responsibilities in littoral regions are undefined and geared toward "blue water" operations? An additional problem is the functional area commanders. By design, they have the ability to task assets from the Marine Air Ground Task Force (MAGTF). This arrangement could easily "strip" from the MAGTF forces ranging from Marine aviation (strike warfare) to an embarked small boat company (countermine operations). An all-encompassing functional authority could quickly erode the overall effectiveness and efficiency inherent in the MAGTF combined arms team. A better approach might leave amphibious forces outside the Navy CWC organization, and integrate them at the numbered fleet level. This would preclude asset "stripping" from the MAGTF, yet provide for the umbrella of support necessary to conduct amphibious operations.

Supported/Supporting: The concept of "supported" and "supporting" command relationships for OMFTS stems directly from Joint doctrine.³¹ As it currently exists, the idea is somewhat vague in defining detailed command relationships during amphibious operations. Since amphibious operations are usually very complex military activities this vagary seems contradictory to the successful planning and execution of OMFTS. But it is a purposeful decision that attempts to provide flexibility to the CJTF depending on the requirements of a specific operation. With CNAF and CALF, the goal is to create a more flexible command arrangement that is situation dependent. At its heart is the idea of "support" vice "control". Joint Publication 0-2 (Joint Command and Control) defines support as establishing when an organization should aid, protect, complement, or sustain another force.³² Part of this involves determining priorities and the degree of authority of different units. Though vague in nature compared to the measures of OPCON or TACON, this arrangement does provide a flexible command structure that can rapidly evolve

depending on missions requirement. This concept should also serve to reduce friction among components since the supported commander has authority to exercise direction of the supporting effort, but *cannot* determine the tactics, forces, methods or procedures for the supporting effort.³³

This system may prove advantageous. First, it places a premium on the ability to “evolve” command relationships as situations change. Rapidly changing situations are the hallmark of maneuver warfare and will probably exemplify OMFTS in the future. Additionally, the system is built on concepts inherent in Joint command and control doctrine.

Supported/supporting frameworks are routinely utilized by unified CINCs in executing military operations. The inter-service acceptance and understanding of the supported and supporting concept should only serve to increase the effectiveness of future operations.

Finally, the supported/supporting command structure will maintain the special relationship between the Navy and Marine Corps while providing flexible command and control options for employment of Naval forces in the next century.

CONCLUSIONS AND RECOMMENDATIONS

The continued development of doctrine and TTPs which will allow the Naval service to successfully employ *Operational Maneuver from the Sea* hinge on the adoption of new Command and Control procedures. Current relationships, codified in the CATF/CLF structure, cannot support the fluid, fast-paced environment implicit in future OMFTS endeavors. Similarly, the Cold War derived concepts embodied in the CWC/NETF organization do not support the offensive character of OMFTS and may undercut the efficiency of Marine forces assigned to operate as part of a NETF. Codification of the CNAF

and CALF, including the broader “supported/supporting” concept for future command and control relationships, will provide the necessary flexibility necessary to win in the littoral battlespace of the future.

NOTES

- ¹U.S. Marine Corps, Operational Maneuver From the Sea, Washington, D.C.: 4 January 1996. P.3.
- ²Ibid. P.10.
- ³ Harrison, LCDR Wayne J., "Weapons Proliferation and its Impact on *Forward...From the Sea*,"(Unpublished Research Paper, U.S. Naval War College, Newport, R.I.:1999), 5.
- ⁴Joint Chiefs of Staff, Department of Defense Dictionary of Military and Associated Terms (Joint Pub 3-04)(Washington, D.C.: July 31, 1991), 77.
- ⁵ Ibid, P.88.
- ⁶Ibid, P.104.
- ⁷Capt. Edward A. Yeaste and Capt. Gilbert C. Gonzalez, "USN/USMC Antiair Warfare and Command,Control,and Communications for Amphibious Operations," (Unpublished Research Paper, U.S.Naval Post Graduate School, Monterey, CA.: 1992), 8.
- ⁸ U.S. Marine Corps, Beyond C2:Comprehensive Command and Control for the Marine Air Ground Task Force Washington, D.C.: 2 June 1998.P. 7-10.
- ⁹ Alfred Vagts, Landing Operations (Harrisburg, PA.: Military Service Publishing Company 1952), 83.
- ¹⁰Sullivan, LTCOL Garret J., "The Genesis of Amphibious Warfare Doctrine," Military Review, May-June 1995, 95.
- ¹¹Center for Naval Analyses, Operations Evaluation Group, Command and Control Roles and Staff Functions of Major Amphibious Forces/Group Commanders, CRC 105 (Arlington, VA.: 1969), 8-12.
- ¹²Ibid. P.3.
- ¹³ Joint Chiefs of Staff, Joint Doctrine for Amphibious Operations(Joint Pub 3-02)(Washington, D.C.: February 7, 1992) 5.
- ¹⁴Harris,CDR W. Lee, "CATF, CWC, and Amphibious Doctrine,"(Unpublished Research Paper, U.S. Army War College, Carlisle Barracks, PA.: 1991) 20-21.
- ¹⁵Ibid. P.23-25.
- ¹⁶Ibid . P.26.
- ¹⁷U.S. Marine Corps, Operational Maneuver from the Sea, Washington, D.C.: 4 January 1996,P. 23.
- ¹⁸U.S. Marine Corps, Concepts and Issues, 1986,(Washington, D.C.)P. 24.
- ¹⁹ Ibid. P. 26.
- ²⁰U.S. Marine Corps, Warfighting (MCDP 1)(Washington, D.C.: 1992), 3.
- ²¹U.S. Marine Corps, Concepts and Issues, 1998,(Washington, D.C.: 1998) 165.
- ²² Ibid. P.86-87.

²³MAJ Christopher M. Bourne, "Old Joint Team Need A New Approach," U.S. Naval Institute Proceedings, April 1998, 49.

²⁴COL Arthur S. Weber, Command Relationships: A Discussion of the Command Relationships Between Carriers and Amphibs. An Occasional Paper of the Center for Naval Warfare Studies, Research Report 2-98.(Newport, R.I.: U.S. Naval War College, 1998), 14.

²⁵ U.S. Marine Corps, Naval Command Relations Brief, (Marine Corps Combat Development Command)(Quantico, VA.: 26 April 1999), 46-47.

²⁶ ADM Leonard F. Picotte and CAPT Kendall King, "Amphibious Redux," U.S. Naval Institute Proceedings, June 1997, 65.

²⁷Center for Naval Analyses, Operations Evaluation Group, Command and Control Roles and Staff Functions of Major Amphibious Force/Group Commanders, CRC 105 (Arlington, VA.: 1969), B14-B17.

²⁸U.S. Marine Corps, Expeditionary Operations (MCDP 3)(Washington, D.C.:1998), 31.

²⁹MAJ Christopher M. Bourne, "Old Joint Team Needs A New Approach," U.S. Naval Institute Proceedings, April 1998, 49.

³⁰ADM Leonard F. Picotte and CAPT Kendall King, "Amphibious Redux," U.S. Naval Institute Proceedings, June 1997, 65.

³¹U.S. Marine Corps, Naval Command Relations Brief, (Marine Corps Combat Development Command)(Quantico, VA.: 26 April 1999),16-20.

³²Joint Chiefs of Staff, Joint Doctrine for Command and Control(Joint Pub 0-2)(Washington, D.C.: 1995),5.

³³Ibid. 10-11.

BIBLIOGRAPHY

- Anderson, Gary W. "Implementing OMFTS: Infestation and Investation." Marine Corps Gazette, April 1995, 57-60.
- Bourne, Christopher M. "Old Joint Team Needs a New Approach." U.S. Naval Institute Proceedings, April 1998, 47-51.
- Cayce, David M. "Composite Maneuver Warfare Commander." Marine Corps Gazette, March 1995, 44-46.
- Center for Naval Analyses. Operational Evaluation Group. Command and Control Roles and Staff Functions of Major Amphibious/Group Commanders. CRC 105. Arlington, VA: 1969.
- Davis, Jeffrey P. "Will This Dog Hunt?" U.S. Naval Institute Proceedings, August 1998, 31-34.
- Fuqea, David. "Riding the Dragon." U.S. Naval Institute Proceedings, July 1997, 36-41.
- Goertzen, Stephen L. "The Feasibility of the Over-the-Horizon Amphibious Assault for U.S. Navy and Marine Corps Forces" Unpublished Research Paper, U.S. Army Command and General Staff College, Fort Leavenworth, KS: 1993.
- Gresham, William F.P. "OMFTS and the Single Battle Concept." Marine Corps Gazette, June 1996, 39-40.
- Harris, W. Lee. "CATF, CWC, and Amphibious Doctrine" Unpublished Research Paper, U.S. Army War College, Carlisle Barracks, PA: 1991.
- Harrison, Wayne J. "Weapons Proliferation and its Impact on *Forward from the Sea*" Unpublished Research Paper, U.S. Naval War College, Newport, RI: 1999.
- LaPlante, J.B. "The Future of Amphibious Warfare Takes Shape." U.S. Naval Institute Proceedings, May 1994, 86-88.
- Lindberg, Bradley C. "The Power of a NEF: But Who Is in Charge?" Marine Corps Gazette, August 1997, 38-39.
- Mason, Douglas E. and Phillips, Jason F. "OMFTS: A Perspective." Marine Corps Gazette, August 1997, 56-60.
- Moore, Scott R. "Maneuver From the Sea...Maybe." Marine Corps Gazette, April 1996, 24-27.

Mundy, Carl E. "Thunder and Lightning: Joint Littoral Warfare." Joint Forces Quarterly, Spring 1994, 45-50.

Picotte, Leonard F. and King, Kendall. "Amphibious Redux." U.S. Naval Institute Proceedings, June 1997, 63-65.

Pierce, Terry. "Operational Maneuver From the Sea." U.S. Naval Institute Proceedings, August 1994, 30-34.

_____. "Taking Maneuver Warfare to Sea." U.S. Naval Institute Proceedings, April 1995, 74-77.

Prina, L. Edgar. "From Over the Horizon to Over the Beach." Seapower, November 1995, 22-26.

Quist, Burton C. "Naval Expeditionary Warfare Update." Marine Corps Gazette, March 1996, 38-41.

Sullivan, Garrett J. "The Genesis of Amphibious Warfare Doctrine." Military Review, May-June 1995, 95-97.

U.S. Joint Chiefs of Staff. Joint Doctrine for Command and Control (Joint Pub 0-2) Washington, D.C.: 1995.

U.S. Joint Chiefs of Staff. Joint Doctrine for Amphibious Operations (Joint Pub 3-02) Washington, D.C.: 1992.

U.S. Joint Chiefs of Staff. Department of Defense Dictionary of Military and Associated Terms (Joint Pub 3-04) Washington, D.C.: July 1991.

U.S. Marine Corps. Warfighting (MCDP 1) Washington, D.C.: 1992.

U.S. Marine Corps. Expeditionary Operations (MCDP 3) Washington, D.C.: 1998.

U.S. Marine Corps. Operational Maneuver From the Sea Washington, D.C.: 1996.

U.S. Marine Corps. Beyond C2: A Concept for Comprehensive Command and Control Of the Marine Air-Ground Task Force Washington, D.C.: June 1998.

U.S. Marine Corps. Concepts and Issues, 1986 Washington, D.C.: 1986.

U.S. Marine Corps. Concepts and Issues, 1998 Washington, D.C.: 1998.

U.S. Marine Corps. Naval Command Relations Brief (Marine Corps Combat Development Command) Quantico, VA: 26 April 1999.

U.S. Navy. Naval Warfare (NDP 1) Washington, D.C.: March 1994.

Vagts, Alfred. Landing Operations. Harrisburg, PA.: Military Service Publishing Company, 1952.

Weber, Arthur S. Command Relationship: A Discussion of the Command Relationships Between Carriers and Amphibs. An Occasional Paper of The Center for Naval Warfare Studies, Report 2-98, U.S. Naval War College, Newport, R.I.: 1998.

Yeaste, Edward A. and Gonzalez, Gilbert C. "USN/USMC Antiair Warfare and Command, Control, and Communications for Amphibious Operations." Unpublished Research Paper, U.S. Naval Post Graduate School, Monterey, CA.: 1992.